Ms. Debbie Tolliver
Lehigh Portland Cement Company
P.O. Box 97
Mitchell, IN 47446

Re: Minor Source Modification No:
093-11313-00002

Dear Ms. Tolliver:

Lehigh Portland Cement Company applied for a Part 70 operating permit on May 31, 1996 for a Portland cement manufacturing operation. An application to modify the source was received on August 31, 1999. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

(a) One (1) CKD mixer, identified as EU24B, with a maximum capacity of 104 tons of cement dust per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7B, and exhausting to one (1) stack, identified as S-KDC7B.

(b) One (1) conditioned CKD truck loadout, with a maximum capacity of 104 tons of conditioned CKD per hour, with PM emissions uncontrolled, and exhausting directly to the atmosphere.

The proposed Minor Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). The source may begin operation upon issuance of the source modification approval.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, press 0 and ask for Bryan Sheets or extension 3-0431, or dial (317) 233-0431.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments
bjs
cc: File - Lawrence County
U.S. EPA, Region V
Lawrence County Health Department
Air Compliance Section Inspector - Joe Foyst
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

PART 70 MINOR SOURCE MODIFICATION
OFFICE OF AIR MANAGEMENT

Lehigh Portland Cement Company
121 North First Street
Mitchell, Indiana 47446

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 093-11313-00002	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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SECTION A SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the emission units contained in conditions A.1 through A.2 and the emission unit description box in Section D.1 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary Portland cement manufacturing plant.

Responsible Official:	Edward E. Epping
Source Address:	121 North First Street, Mitchell, Indiana 47446
Mailing Address:	P.O. Box 97, Mitchell, Indiana 47446
Phone Number:	(812) 849-2191
SIC Code:	3241
County Location:	Lawrence
County Status:	Attainment or unclassified for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules; Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

(a) One (1) mixer, identified as EU24B, with a maximum capacity of 104 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7B, and exhausting to one (1) stack, identified as S-KDC7B.

(b) One (1) truck loadout, identified as F07, with a maximum capacity of 104 tons per hour, with PM emissions uncontrolled, and exhausting directly to the atmosphere.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to obtain a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Permit No Defense [IC 13]

This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions [326 IAC 2-7-1]

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, on the attached Certification Form, with each submittal.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this approval, including the following information on each emission unit:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. IDEM, OAM, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.

(b) Any application requesting an amendment or modification of this approval shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this approval:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

C.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute, rule, or this approval, all air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

Testing Requirements [326 IAC 2-7-6(1)]

C.6 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

(a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM, within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.7 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this approval. All monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.8 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected emission unit while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline.

(c) IDEM, OAM reserves the authority to take any actions allowed under the law to resolve noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.9 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(a) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(b) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform these requirements.

C.10 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Records of required monitoring information shall include, where specified in Section D:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where specified in Section D:

(1) Copies of all reports required by this approval;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the

response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this approval, and whether a deviation from an approval condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

C.11 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) The reports required by conditions in Section D of this approval shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this approval, any notice, report, or other submission required by this approval shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

(c) Unless otherwise specified in this approval, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(d) The first report shall cover the period commencing on the date of issuance of this approval and ending on the last day of the reporting period.

SECTION D.1 EMISSION UNIT OPERATION CONDITIONS

Emission Unit Description [326 IAC 2-7-5(15)]

(a) One (1) mixer, identified as EU24B, with a maximum capacity of 104 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7B, and exhausting to one (1) stack, identified as S-KDC7B.

(b) One (1) truck loadout, identified as F07, with a maximum capacity of 104 tons per hour, with PM emissions uncontrolled, and exhausting directly to the atmosphere.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-3]

(a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the CKD mixer (EU24B) and truck loadout (F07), along with existing cement kiln dust (CKD) storage and handling equipment (EU24 and EU24A) shall not exceed 51.3 pounds per hour when operating at a process weight rate of 100 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0P^{0.11} - 40$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

(b) The particulate matter (PM) emission rate from the CKD mixer (EU24B) and truck loadout (F07) shall be less than 25 tons per year. Therefore, the requirements of 326 IAC 2-2 and 40 CFR 52.21 will not apply.

(c) The particulate matter less than 10 microns (PM_{10}) emission rate from the CKD mixer (EU24B) and truck loadout (F07) shall be less than 15 tons per year. Therefore, the requirements of 326 IAC 2-2 and 40 CFR 52.21 will not apply.

D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this approval, is required for these facilities and their associated control devices.

Compliance Determination Requirements

D.1.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these emission units by this permit. However, IDEM may require compliance testing when necessary to determine if the emission units are in compliance. If testing is required by IDEM, compliance with the limits specified in this section shall be determined by performance tests conducted in accordance with Section C - Performance Testing.

D.1.4 Particulate Matter (PM)

Except as otherwise provided by statute, rule, or this approval, the baghouse (KDC7B) for PM control shall be in operation at all times when the associated emission unit is in operation.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: Lehigh Portland Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Source Modification No.: 093-11313-00002

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD)
for a Part 70 Minor Source Modification.

Source Background and Description

Source Name:	Lehigh Portland Cement Company
Source Location:	121 North First Street, Mitchell, Indiana 47446
County:	Lawrence
SIC Code:	3241
Operation Permit No.:	T 093-5990-00002
Operation Permit Issuance Date:	Not issued
Minor Source Modification No.:	093-11313-00002
Permit Reviewer:	Bryan Sheets

The Office of Air Management (OAM) has reviewed a modification application from Lehigh Portland Cement Company relating to the construction of the following emission units and pollution control devices:

(a) One (1) mixer, identified as EU24B, with a maximum capacity of 104 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7B, and exhausting to one (1) stack, identified as S-KDC7B.

(b) One (1) truck loadout, identified as F07, with a maximum capacity of 104 tons per hour, with PM emissions uncontrolled, and exhausting directly to the atmosphere.

History

On August 31, 1999, Lehigh Portland Cement Company submitted an application to the OAM requesting to add a cement kiln dust (CKD) moisture conditioning system and truck loadout to their existing plant. As of the date of receipt of this application, Lehigh's Part 70 permit has not been issued. Lehigh Portland Cement Company submitted a Part 70 permit application on May 31, 1996. The equipment included in this decision will be incorporated into the final Part 70 permit.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
S-KDC7B	CKD Mixer	NA	NA	3000	< 212

Recommendation

The staff recommends to the Commissioner that the Part 70 Minor Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on August 31, 1999.

Emission Calculations

See Appendix A of this document for detailed emissions calculations.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	18.7
PM-10	9.34
SO_2	--
VOC	--
CO	--
NO_x	--

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Minor Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(e) because the potential to emit PM and PM-10 from the modification is less than 25 tons per year but greater than 5 tons per year.

County Attainment Status

The source is located in Lawrence County.

Pollutant	Status
PM-10	attainment or unclassifiable
SO_2	attainment or unclassifiable
NO_2	attainment or unclassifiable
Ozone	attainment or unclassifiable
CO	attainment or unclassifiable
Lead	attainment or unclassifiable

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Lawrence County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Lawrence County has been classified as attainment or unclassifiable for all regulated pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Potential Emissions (tons/year)
PM	greater than 250
PM-10	greater than 250
SO_2	greater than 250
VOC	less than 100
CO	greater than 100, less than 250
NO_x	greater than 250

(a) This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the 28 listed source categories.

(b) These emissions are based upon Title V permit application calculations.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

Process/Facility	Potential to Emit (tons/year)						
	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
CKD Mixer	0.18	0.09	--	--	--	--	--
Truck Loadout	0.45	0.23	--	--	--	--	--
Net Emissions Increase	0.63	0.32	--	--	--	--	--
PSD Threshold Level	25	15	40	40	100	40	--

(a) This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

(b) The emissions of PM and PM-10 from the CKD mixer are controlled by the baghouse to a level of 0.18 and 0.09 tons per year, respectively.

Federal Rule Applicability

(a) The mixer (EU24B) and the truck loadout (F07) are not subject to the New Source Performance Standard, 326 IAC 12, 40 CFR 60, Subpart F because the rule does not include cement kiln dust handling as an affected facility.

(b) The mixer (EU24B) and the truck loadout (F07) are not subject to the National Emission Standards for Hazardous Air Pollutants, 326 IAC 14, 40 CFR 63, Subpart LLL because the rule does not include cement kiln dust handling as an affected facility.

State Rule Applicability

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8) (Emission Statement Operating Year).

326 IAC 4-1 (Open Burning)

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

(a) Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,

(b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the CKD mixer and truck loadout, along with existing CKD waste bins (EU24) and CKD truck loadout (EU24A) shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The baghouse shall be in operation at all times the CKD mixer is in operation, in order to comply with this limit.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no compliance monitoring requirements for these emissions units because they are insignificant activities as defined under 326 IAC 2-7.

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 093-11313-00002.

Appendix A: Emissions Calculations
Cement Kiln Dust Mixer and Truck Loading

Company Name: Lehigh Portland Cement Company
Address City IN Zip: 121 N. First Street, Mitchell, IN 47446
CP: 093-11313-00002
Plt ID: 093-00002
Reviewer: Bryan Sheets
Date: 9/7/99

A. CKD Mixer

There are no emission factors available in AP-42, FIRE, or other EPA guidance documents for the kiln dust conditioning system. Because the process is similar to cement batching, the cement batching emission factors in FIRE, Version 6.22, were used to determine PM/PM10 emissions. The emission factor for mixer loading (SCC 3-05-011-09) was used for the CKD mixer.

Potential to Emit (PTE) Before Controls:

Potential PM Emissions = Cement Mixer Loading Emission Factor (lb/ton) x Rated Capacity (ton/hr)
= 0.04 lb PM/ton material x 104 tons material/hr
= 4.16 lbs PM/hr
= 18.2 tons PM/yr

Potential PM10 Emissions = Cement Loading/Mixing Emission Factor (lb/ton) x Rated Capacity (ton/hr)
= 0.02 lb PM10/ton material x 104 tons material/hr
= 2.08 lbs PM10/hr
= 9.11 tons PM10/yr

Potential to Emit (PTE) After Controls:

Controlled PM Emissions = Potential PM Emissions (lbs/hr) x (1 - Control Efficiency)
= 4.16 lbs PM/hr x (1 - 0.99)
= 0.04 lbs PM/hr
= 0.18 ton PM/yr

Controlled PM10 Emissions = Potential PM10 Emissions (lbs/hr) x (1 - Control Efficiency)
= 2.08 lbs PM10/hr x (1 - 0.99)
= 0.02 lbs PM10/hr
= 0.09 ton PM10/yr

B. Truck Loadout

There are no emission factors available in AP-42, FIRE, or other EPA guidance documents for the kiln dust conditioning system. Therefore, the quantity of particulate matter generated by the truck loading will be determined from an AP-42 emission factor for drop operations. The emission factor is calculated as follows.

Emission Factor = k x (0.0032) x [(U/5)^1.3] / [(M/2)^1.4]

where k = particle size multiplier (0.35 for PM10, 1.0 for PM)
U = mean wind speed (mile/hr) = 15
M = material moisture content = 10%

PM Emission Factor = 0.001 lbs/ton PM10 Emission Factor = 0.0005 lbs/ton

Potential to Emit (PTE):

Potential PM Emissions = Mixer Truck Loading Emission Factor (lb/ton) x Rated Capacity (ton/hr)
= 0.001 lb PM/ton material x 104 tons material/hr
= 0.104 lbs PM/hr
= 0.45 tons PM/yr

Potential PM10 Emissions = Cement Loading/Mixing Emission Factor (lb/ton) x Rated Capacity (ton/hr)
= 0.0005 lb PM10/ton material x 104 tons material/hr
= 0.052 lbs PM10/hr
= 0.23 tons PM10/yr